WE CLAIM:

1. An airflow control apparatus having a plurality of doors and outlets for controlling an airflow in a vehicular HVAC system, said apparatus comprising:

a housing having a inlet for receiving the airflow;

a first chamber of said housing controlled by a first door, and having a first outlet and a first passage; and

a second chamber of said housing coupled to said first passage and controlled by said first door, a second door and a third door, said second chamber having a second outlet and a third outlet, wherein said second and third doors each control the airflow to said second and third outlets.

2. The apparatus of claim 1 wherein said first door is movable to any position between an open position enabling substantially all of the airflow in said first chamber to exit said first outlet and a closed position enabling substantially all of the airflow in said first chamber to enter said first passage.

3. The apparatus of claim 1 wherein said first outlet comprises a defrost outlet.

4. The apparatus of claim 1 wherein said second outlet comprises a panel outlet.

5. The apparatus of claim 1 wherein said third outlet comprises a floor outlet.

6. The apparatus of claim 1 further comprising a wall dividing said second chamber into a third chamber and a fourth chamber.

7. The apparatus of claim 6 wherein said second door is movable within said third chamber to any position between a first position enabling substantially all of the airflow to a driver zone to exit a panel outlet and a second position enabling substantially all of the airflow to said driver zone to exit a floor outlet.

8. The apparatus of claim 6 wherein said third door is movable within said fourth chamber independent of said second door to any position between a first position enabling substantially all of the airflow to a passenger zone to exit a panel outlet and a second position enabling substantially all of the airflow to said passenger zone to exit a floor outlet.

9. An airflow control apparatus having a plurality of doors and outlets for controlling an airflow in a vehicular HVAC system, said apparatus comprising:

a first chamber having a first outlet and a first passage;

a first door controlling the airflow to said first outlet and said first passage;

a second chamber coupled to said first passage and having a second outlet and a third outlet;

a wall diving said second chamber into a third chamber for providing airflow to a driver zone and a fourth chamber for providing airflow to a passenger zone;

a second door positioned in said third chamber, wherein said second door controls airflow from said third chamber to said second and third outlets; and

a third door positioned in said fourth chamber, wherein said third door controls airflow from said fourth chamber to said second and third outlets independent of said second door.

10. The apparatus of claim 9 wherein said first outlet comprises a defrost outlet, said second outlet comprises a panel outlet and said third outlet comprises a floor outlet.

11. The apparatus of claim 10 wherein said first door is movable between an open position enabling substantially all of the airflow to exit said defrost outlet and a closed position enabling substantially all of the airflow to enter said first passage.

12. The apparatus of claim 9 wherein said second door is movable between a first position enabling substantially all of the airflow in said third chamber to exit by way of a driver panel outlet and a second position enabling substantially all of the airflow in said third chamber to exit by way of a driver floor outlet.

13. The apparatus of claim 9 wherein said third door is movable between a first position enabling substantially all of the airflow in said fourth chamber to exit by way of a passenger panel outlet and a second position enabling substantially all of the airflow in said fourth chamber to exit by way of a passenger floor outlet.

14. An airflow control apparatus having a plurality of doors and outlets for controlling an airflow in a vehicular HVAC system, said apparatus comprising:

a first chamber having a defrost outlet and a first passage;

a first door controlling the airflow to said defrost outlet and said first passage;

a second chamber and a third chamber to receive the airflow from said first passage;

a second door positioned in said second chamber for controlling airflow to a driver panel outlet and a driver floor outlet; and

a third door positioned in said third chamber for controlling airflow to a passenger panel outlet and a passenger floor outlet independent of said second door.

15. An airflow control apparatus having a plurality of doors and outlets for controlling an airflow in a vehicular HVAC system, said apparatus comprising:

a first passage controlled by a first door;

a first outlet controlled by a second door and a third door operating independent of the other, wherein said second door and said third door control the airflow from said first passage through said first outlet to a first zone and a second zone, respectively; and

a second outlet controlled by said second door and said third door, each operating independent of the other, wherein said second door and said third door control the airflow from said first passage through said second outlet to a third zone and a fourth zone, respectively.

16. The apparatus of claim 15 further comprising a third outlet, wherein said first door is movable between a substantially open position enabling substantially all of the airflow to exit said third outlet and a substantially closed position enabling substantially all of the airflow to enter said first passage.

17. The apparatus of claim 16 further comprising a first chamber and a second chamber connected by said first passage to direct airflow from said first chamber to said first outlet and said second outlet through said second chamber.

18. The apparatus of claim 17 further comprising a wall dividing said second chamber into a third chamber and a fourth chamber.

19. The apparatus of claim 18 wherein said wall further divides said first outlet into a fourth outlet and a fifth outlet and divides said second outlet into a sixth outlet and a seventh outlet.

20. The apparatus of claim 19 wherein said second door is movable between a first position enabling substantially all of the airflow to exit said fourth outlet and a second position enabling substantially all of the airflow to exit said sixth outlet.

21. The apparatus of claim 19 wherein said third door is movable between a first position enabling substantially all of the airflow to exit said fifth outlet and a second position enabling substantially all of the airflow to exit said seventh outlet.

22. An airflow control apparatus having a plurality of doors and outlets for controlling an airflow in a vehicular HVAC system, said apparatus comprising:

a first outlet controlled by a first door;

a first passage controlled by said first door, wherein said first door is movable to any position between an open position enabling substantially all of the airflow to exit said first outlet and a closed position enabling substantially all of the airflow to enter said first passage;

a second outlet connected to said first passage and controlled by a second door and a third door, each operating independent of the other, wherein said second and third doors control the amount of airflow through said second outlet to a driver zone and a passenger zone, respectively; and

a third outlet connected to said first passage and controlled by said second door and said third door, each operating independent of the other, wherein said second and third doors control the amount of airflow through said third outlet to a driver zone and a passenger zone, respectively.

23. The apparatus of claim 22 further comprising a wall dividing said second outlet into a fourth outlet and a fifth outlet.

24. The apparatus of claim 23 wherein said wall further divides said third outlet into a sixth outlet and a seventh outlet.

25. The apparatus of claim 24 wherein said second door is movable to any position between a first position blocking the airflow from exiting said fourth outlet to a panel vent on said driver zone and a second position blocking airflow from exiting said sixth outlet to a floor vent on said driver zone.

26. The apparatus of claim 25 wherein said third door is movable to any position between a first position blocking airflow from exiting said fifth outlet to a panel vent on said passenger zone and a second position blocking airflow from exiting said seventh outlet to a floor vent on said passenger zone.

27. An airflow control apparatus having a plurality of doors and outlets for controlling an airflow in a vehicular HVAC system, said apparatus comprising:

a defrost outlet controlled by a first door;

a first passage controlled by said first door, wherein said first door is movable between an open position enabling substantially all of the airflow to exit said defrost outlet and a closed position enabling substantially all of the airflow to enter said first passage;

a panel outlet coupled to receive the airflow by way of said first passage;

a floor outlet coupled to receive the airflow by way of said first passage;

a wall dividing said panel outlet into a driver panel outlet and a passenger panel outlet and dividing said floor outlet into a driver floor outlet and a passenger floor outlet;

a second door for controlling the airflow to said driver panel outlet and said driver floor outlet; and

a third door for controlling the airflow to said passenger panel outlet and said passenger floor outlet.

28. An airflow control apparatus having a plurality of doors and outlets for controlling an airflow in a vehicular HVAC system, said apparatus comprising:

a housing having an inlet for receiving the airflow;

a first door movable within said housing between a first position and a second position for controlling the airflow to a first outlet and a first passage;

a second door movable within said housing between a first position and a second position for controlling a first portion of the airflow received from said first passage and directed to a driver side of a vehicle; and

a third door movable within said housing between a first position and a second position for controlling a second portion of the airflow received from said first passage and directed to a passenger side of a vehicle.

29. The apparatus of claim 28 wherein said first outlet comprises a defrost outlet.

30. The apparatus of claim 28 further comprising a first chamber wherein said first door is movable within said first chamber between an open position enabling substantially all of the airflow to exit said first outlet and a closed position enabling substantially all of the airflow to enter said first passage.

31. The apparatus of claim 28 further comprising a second chamber connected to the first passage to receive the airflow therefrom and having a wall dividing said second chamber into a third chamber and a fourth chamber.

32. The apparatus of claim 31 further comprising a second outlet and a third outlet.

33. The apparatus of claim 32 wherein said second outlet comprises a panel outlet and said third outlet comprises a floor outlet.

34. The apparatus of claim 33 further comprising a wall dividing said panel outlet into a driver panel outlet and a passenger panel outlet and said floor outlet into a driver floor outlet and a passenger floor outlet.

35. The apparatus of claim 34 wherein said second door is movable within said third chamber between a first position enabling substantially all of the airflow in said third chamber to exit said driver panel outlet and a second position enabling substantially all of the airflow in said fourth chamber to exit said driver floor outlet, and wherein said third door is movable within said fourth chamber between a first position enabling substantially all of the airflow in said fourth chamber to exit said passenger panel outlet and a second position enabling substantially all of the airflow in said fourth chamber to exit said passenger floor outlet.

36. An airflow control apparatus having a plurality of doors and outlets for controlling an airflow in a vehicular HVAC system comprising:

a first door movable between a first position and a second position for controlling the airflow to a defrost outlet and a first passage leading to a panel outlet and a floor outlet;

a wall dividing said panel outlet into a driver panel outlet and a passenger panel outlet and dividing said floor outlet into a driver floor outlet and a passenger floor outlet;

a second door movable between a first position and a second position for controlling the airflow received from said first passage and provided to said driver panel outlet and said driver floor outlet; and

a third door movable between a first position and a second position for controlling the airflow received from said first passage and provided to said passenger panel outlet and said passenger floor outlet.

37. A method of controlling an airflow in a vehicular HVAC system, said method comprising the steps of:

receiving the airflow into a first chamber of a housing;

controlling the airflow from said first chamber to a second chamber of a housing with a first door;

controlling the airflow from said second chamber to a first zone with a second door; and

controlling the airflow from said second chamber to a second zone with a third door.

38. The method of claim 37 wherein said step of controlling the airflow from said first chamber with a first door comprises both controlling the airflow provided to a first outlet and controlling the airflow provided to said second chamber by way of a passageway in said housing.

39. The method of claim 37 wherein said step of controlling airflow from said second chamber to a first zone comprises controlling the division of airflow between a second outlet and a third outlet with said second door.

40. The method of claim 39 wherein said step of controlling airflow from said second chamber to a second zone comprises controlling the airflow provided to said second outlet and said third outlet with said third door.

41. The method of claim 37 wherein said step of controlling airflow from said second chamber to a first zone comprises dividing the airflow from said first chamber between a fourth outlet and a sixth outlet with said second door, and wherein said step

of controlling airflow from said second chamber to a second zone comprises dividing the airflow from said first chamber between a fifth outlet and a seventh outlet with said third door.

42. A method of controlling airflow in a vehicular HVAC system, said method comprising the steps of:

directing an airflow into a chamber;

controlling the airflow from a first portion in said chamber to a driver zone of said vehicle by way of a driver panel outlet and a driver floor outlet with a door; and

controlling the airflow from a second portion in said chamber to a passenger zone of said vehicle by way of a passenger panel outlet and a passenger floor outlet with another third door.

43. A method of controlling airflow in a vehicular HVAC system, said method comprising the steps of:

providing a first chamber having a first outlet and a first passageway;

varying the position of a first door to control the amount of airflow that passes out of said first outlet and to control the amount of airflow that passes to a second chamber by way of said first passageway;

varying the position of a second door to control the airflow from said second chamber to a driver zone; and

varying the position of a third door to control the airflow from said second chamber to a passenger zone.

44. The method of claim 43 wherein said step of varying the position of a first door comprises controlling the amount of airflow passing to a defrost outlet and said second chamber.

45. The method of claim 43 wherein said step of varying the position of a second door comprises dividing the airflow between a driver panel outlet and a driver floor outlet with said second door.

46. The method of claim 43 wherein said step of varying the position of a third door comprises dividing the airflow between a passenger panel outlet and a passenger floor outlet with said third door.

47. The method of claim 43 wherein said step of varying the position of a second door comprises controlling the airflow to said driver zone with said second door by way of a fourth outlet and a sixth outlet.

48. The method of claim 47 wherein said step of varying the position of a third door comprises controlling the airflow said passenger zone with said third door by way of a fifth outlet and a seventh outlet.

49. A method of controlling airflow in a multi-chamber apparatus of a vehicular HVAC system, said method comprising the steps of:

providing a first chamber having a first outlet and a first passageway;

varying the position of a first door to control the amount of airflow that passes from said first outlet and to control the amount of airflow that provided to a second chamber by way of said first passageway;

varying the position of a second door to control the airflow from said second chamber passing to a driver zone through a driver panel outlet and a driver floor outlet; and

varying the position of a third door to control the airflow from said second chamber passing to a passenger zone through a passenger panel outlet and a passenger floor outlet.